

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO	0.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,864		06/12/2001	Francesco Lazzeri	P/62250	3488
156	7590	01/25/2005		EXAMINER	
		TTINGER, ISRAE	CHEN, TSE W		
& SCHIFFMILLER, P.C. 489 FIFTH AVENUE NEW YORK, NY 10017				ART UNIT	PAPER NUMBER
				2116	
				DATE MAILED: 01/25/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
•		09/879,864	LAZZERI, FRANCESCO				
	Office Action Summary	Examiner	Art Unit				
		Tse Chen	2116				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on <u>05 November 2004</u> .						
	This action is FINAL . 2b) This	action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ 5)□ 6)⊠ 7)□	Claim(s) 17-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 17-32 is/are rejected.						
Applicati	ion Papers						
9)[The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)□	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	nt(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		ate Patent Application (PTO-152)				

Application/Control Number: 09/879,864 Page 2

Art Unit: 2116

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment dated November 5, 2004.

2. Claims 17-32 are presented for examination. Applicant has canceled claims 1-16.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 17, 20-21, 23-24, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reese, US Patent 5583796¹, in view of Keiles, US Patent 4141066.
- 5. In re claim 17, Reese discloses a method for effecting protection of a digital communication system having an independently configurable communication unit [switching control unit 135] and a protection unit [backup switching control unit 119] allocated to the communications unit [where 1 is less than or equal to K protection unit; K=1; column 6, lines 38-40], the method comprising the steps of:
 - In an initial setting-up stage for the protection unit, supplying the protection unit with configuration data relating to the communication unit [column 1, line 62 to column 2, lines 4; column 2, lines 31-34] and storing said data in respective

¹ Although the following citations may refer to different embodiments, the focused matter in each instance is consistent among the embodiments [column 1, lines 65-67; column 11, lines 15-18].

Art Unit: 2116

Page 3

memory locations in the protection unit [column 1, lines 65-67; column 4, lines 20-21];

- Where so required, subsequently updating said data with update data relating to said communication unit [column 6, lines 31-33];
- In the event of a fault occurring involving the communication unit, sending to the protection unit an indication that the communication unit is involved in the fault [column 7, lines 19-22; column 11, lines 55-58]; and
- Causing the protection unit to use said indication to identify the memory location associated with the fault-related communication unit and to use the configuration data in that memory location as its own configuration data, thereby to take over the role of that communication unit in the communications system [column 10, lines 43-50; column 11, lines 58-64].
- 6. Reese did not disclose N independently configurable communication units to be greater than or equal to 2.
- 7. Keiles discloses a method of effecting protection of a digital communication system having N [3] independently configurable communication units [controllers 2, 4, 6] and K [1] protection units [backup controller 12] allocated to the N communications units, where 1 is less than or equal to K [1] is less than or equal to N [3], and where N [3] is greater than or equal to 2 [fig.1; col.2, ll.30-68].
- 8. It would have been obvious to one of ordinary skill in the art, having the teachings of Reese and Keiles before him at the time the invention was made, to modify the system taught by Reese to include the 1:N configuration [one protection unit to a plurality of communications

Art Unit: 2116

units] taught by Keiles, as the 1:N configuration taught by Keiles is a well known backup configuration suitable for use in many systems, including that of Reese. One of ordinary skill in the art would have been motivated to make such a combination as it provides a way to employ multiple communication units to control multiple operations [Keiles: col.1, ll.20-52] as well as a safe system with a larger coverage [more cameras] while controlling costs by avoiding the need to purchase additional protection units.

- 9. As per claim 20, Reese taught the indication is sent to the protection unit by way of a controller unit which controls the configuring of the communication units [backup controller 36'].
- 10. As per claim 21, Reese taught the indication is sent to the protection unit from the controller unit by way of a bus [Ethernet 10BaseT; column 11, lines 26-31].
- 11. As per claim 23, Reese taught the fault is detected by a sensor device [backup controller 36'; column 11, lines 55-60] and the indication is sent to the protection unit directly by the sensor device [column 10, lines 54-57].
- 12. As per claim 24, it would have been obvious to one of ordinary skill in the art, having the teachings of Reese and Keiles before him at the time the invention was made, to have the configuration data associated with the communications unit 1 to N supplied to the protection unit in consecutive sequence from one of the communication units 1 and N to the other of the communication units 1 and N [column 1, line 62 to column 2, lines 4; since there is only one protection unit, the configuration data from the communication units are supplied in consecutive sequence in the broadest interpretation in order for the one protection unit to adequately handle the processing].

Art Unit: 2116

13. As per claim 28, Reese taught K=1 [column 6, lines 40-41].

- 14. As per claim 29, Reese discloses a 1:1 protection arrangement for a digital telecommunications system having an independently configurable communication unit [switching control unit 135] and a protection unit [backup switching control unit 119] allocated to the communication unit [where 1 is less than or equal to K; K=1; column 6, lines 38-40], the invention comprising:
 - A means for supplying the protection unit with configuration data relating to the communication unit [column 1, line 62 to column 2, lines 4; column 2, lines 31-34] and storing said data in the protection unit [column 4, lines 20-21; column 6, lines 39-40];

Page 5

- A means for subsequently updating said data with update data relating to said communication unit [column 6, lines 31-33];
- A means for sensing the occurrence of a fault involving the communication unit [column 11, lines 54-55];
- A means for sending to the protection unit an indication that the communication unit is involved in the fault [column 7, lines 19-22; column 11, lines 55-58]; and
- A means for causing the protection unit to use said indication to access the configuration data associated with the fault-related communication unit and to use said configuration data as its own configuration data, thereby to take over the role of that communication unit in the communications system [column 10, lines 43-50; column 11, lines 58-64].

Art Unit: 2116

- 15. Reese did not disclose N independently configurable communication units to be greater than or equal to 2.
- 16. Keiles discloses K:N [1:N] protection arrangement for a digital telecommunications system having N [3] independently configurable communication units [controllers 2, 4, 6] and K [1] protection units [backup controller 12] allocated to the N communications units, where 1 is less than or equal to K [1] is less than or equal to N [3], and where N [3] is greater than or equal to 2 [fig.1; col.2, ll.30-68].
- 17. It would have been obvious to one of ordinary skill in the art, having the teachings of Reese and Keiles before him at the time the invention was made, to modify the system taught by Reese to include the 1:N configuration [one protection unit to a plurality of communications units] taught by Keiles, as the 1:N configuration taught by Keiles is a well known backup configuration suitable for use in many systems, including that of Reese. One of ordinary skill in the art would have been motivated to make such a combination as it provides a way to employ multiple communication units to control multiple operations [Keiles: col.1, ll.20-52] as well as a safe system with a larger coverage [more cameras] while controlling costs by avoiding the need to purchase additional protection units.
- 18. As per claim 30, Reese taught protection arrangement wherein K=1 [column 6, lines 40-41].
- 19. Claims 18, 22, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reese and Keiles as applied to claim 1 above, and further in view of Gerstel et al., U.S. Patent 5793746, hereinafter Gerstel.

Art Unit: 2116

20. Reese and Keiles disclose each and every limitation of the claim, as discussed above in reference to claim 17. Reese and Keiles did not disclose expressly alternative functions for the protection unit or alternative ways to signal the protection unit.

Page 7

- 21. As per claim 18, Gerstel taught an invention for protecting a communication system with a plurality of protection units [abstract; FIG. 2], wherein one or more of the protection units are low-priority traffic carrying units [column 7, lines 41-44] and are supplied with their own configuration data [column 7, lines 47-48].
- 22. As per claim 22, Gerstel taught the indication is sent to the protection unit directly by the fault-related communications unit [column 6, lines 16-20].
- 23. An ordinary artisan at the same time the invention was made would have been motivated to look for a more efficient way to operate communication systems with protection units [Gerstel: column 4, lines 37-41].
- 24. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Reese, Keiles and Gerstel because of the aforementioned motivation and also their involvement in similar problems regarding the protection of communication systems. Furthermore, it would have been obvious to an ordinary artisan to adapt the multiple communication/protection units system of Gerstel to work with the system of Reese and Keiles because the present issues involving the two configurations of communication systems are generally related.
- 25. As per claim 25, Gerstel taught before the protection unit takes over the role of the faultrelated communications unit in the communications system, the traffic previously associated

Art Unit: 2116

with the protection unit is either diverted to a working communications unit or is discarded [column 7, lines 45-47].

Page 8

- 26. As per claim 26, it would have been obvious to an ordinary artisan, after the protection unit has taken over the traffic of the fault-related communications unit, the fault which occasioned such taking over is rectified, the taken-over traffic is redirected back to the fault-related unit, to provide the protection unit with its own configuration data and supply traffic again to the protection unit in effect, restoring the communication system to its normal operation and fulfilling the objective of improving utilization [Gerstel: column 4 lines 39-41].
- 27. As per claim 27, it would have been obvious to an ordinary artisan, once the fault has been rectified, to reconfigure the fault-related communications unit with the configuration data currently required of that unit. Otherwise, the communication system would not operate effectively. Furthermore, the configuration-data updating attribute as taught by Reese [column 1, line 62 to column 2, lines 4; column 2, lines 31-34] would mean these configuration data are sent to the one or more of the protection units.
- 28. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reese and Keiles as applied to claim 17 above, and further in view of Lennie et al., U.S. Patent 6092213, hereinafter Lennie.
- 29. Reese and Keiles disclose each and every limitation of the claim, as discussed above in reference to claim 17. Reese and Keiles did not disclose expressly the details for updating the configuration data on the protection unit.
- 30. Lennie taught an invention for updating configuration data in a protected communication system [abstract], the invention comprising of sending an identification flag to the one or more of

Art Unit: 2116

the protection units [column 2, lines 47-50, lines 57-59] before the configuration-update data relating to the communications units are sent [column 2, lines 60-65], in order to identify the particular communications unit to which the update data pertain [column 2, lines 66].

- 31. An ordinary artisan at the same time the invention was made would have been motivated to look for a consistent and accurate way to maintain configuration data in a protected communication system [Lennie: column 2, lines 7-21].
- 32. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Reese, Keiles and Lennie because of the aforementioned motivation and also their involvement in similar problems regarding the protection of communication systems. Furthermore, it would have been obvious to an ordinary artisan to adapt the multiple communication/protection units system of Lennie to work with the system of Reese and Keiles because the present issues involving the two configurations of communication systems are generally related.
- 33. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reese and Keiles as applied to claims 29 and 30 above, and further in view of Nishikawa et al., U.S. Patent 6658457, hereinafter Nishikawa.
- 34. Reese and Keiles disclose each and every limitation of the claim, as discussed above in reference to claims 29 and 30. Reese and Keiles did not disclose expressly the details of the communication system.
- Nishikawa taught an invention for transmitting information, the invention comprising of an SDH communication system configured to operate with protection units [column 5, lines 21-30].

Application/Control Number: 09/879,864 Page 10

Art Unit: 2116

36. An ordinary artisan at the same time the invention was made would have been motivated to look for key technologies to be implemented with a protection scheme for communication systems [Nishikawa: column 3, lines 53-54].

37. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Reese, Keiles and Nishikawa because of the aforementioned motivation and also their involvement in similar problems regarding communication systems.

Response to Arguments

- 38. All rejections of claim limitations as filed prior to Amendment dated November 5, 2004 not argued in entirety or substantively in response filed as said Amendment have been conceded by Applicant and the rejections are maintained from henceforth.
- 39. Applicant's arguments, with respect to claim 17 [29 is similar], have been fully considered but they are not persuasive.
- 40. Applicant alleges that Reese is distinguished from Applicant in that Reese "teaches a video security system rather than a digital communications system... communication system of claim 17 is distinguished by its prime function being that of the communication of data rather than the capturing of images for security reasons ... presence of communications between the various elements of the security system of Reese does not render its prime function that of communication of data." Firstly, Applicant is incorrect in asserting that Reese does not teach a digital communications system. Examiner kindly invites Applicant to read Reese and remind Applicant that the operations are carried out via digital communication signals [col.3, l.49 col.12, l.14]. Examiner therefore is correctly entitled to interpret [under the broadest

Art Unit: 2116

interpretation, if necessary] Reese disclosing a digital communication system. Secondly, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In the instant case, Reese is capable of performing the intended use of communication of data as demonstrated.

41. Applicant alleges that "restriction of the teaching of Reese to security rather than communications systems leads to collateral divergence between the teaching of Reese and the present invention ... in particular, Reese teaches no provision for supplying a protective unit with configuration data relating to communications units and storing said data in respective memory locations and Reese teaches no provision for the selection from among a plurality of memory locations of the appropriate memory location associated with a fault-related communications unit." Firstly, Applicant is restrictive in asserting that Reese's teaching is restricted to security. Surely, Applicant is not suggesting that Applicant's claimed system can't be used in security or other systems that require digital data communication. Applicant is invited to go on record to clearly define and restrict Applicant's claimed system if Applicant desires. Secondly, Applicant's allegation is illogical – what is the relationship between video security and the storing and selecting of configuration data in respective memory locations [i.e., what does a digital communication system associated with video security have to do with the K:N configuration it can necessarily have]? Again, Examiner kindly invites Applicant to read Reese

Art Unit: 2116

and remind Applicant that Reese discloses a 1:1 configuration [which read on Applicant's claim in the previous Office Action] and can easily be configured to have 1:N configuration by one with ordinary skill in the art [irrelevant of whether the system is associated with video security].

- 42. Applicant alleges that at section 14 of the previous Office Action, Examiner made a "misrepresentation of the disclosure of Reese that discloses no communication units but a single control unit 14". Examiner hereby quotes the referenced section 14: "although Reese discloses a communication system with 1:1 ratio of protection units to communication units, …" Examiner noticed that Applicant conveniently left out the "1:1 ratio" portion and actually made a misrepresentation of Examiner's Office Action.
- 43. Examiner hereby notes Applicant's own restriction that the claimed digital communication system "is dedicated to the communication of data to one or more similar units and has no control over those other units".
- 44. As demonstrated above, Applicant's arguments are not persuasive and the rejection is maintained.
- 45. All other claims were not argued separately.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tse Chen whose telephone number is (571) 272-3672. The

examiner can normally be reached on Monday - Friday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LYNNÉ H. BROWNE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100

Tse Chen January 19, 2005